Aircraft: TOI DHC-6 N821AR

Flight number: 7

Payload Configuration: WISM

New Data Collected: yes Total Flight Time: 1.7 hours Submitted By: Paul Racette

From: GJT To: GJT

Start: 2/10/17 09:15 MST Finish: 2/09/17 11:00 MST

Flight Time: 1.7 hours

Log Number: PI: Tim Durham

Funding Source: Parminder Ghuman - NASA - SMD - ESD ESTO - IIP Program Manager

Purpose of Flight: Science

Comments: Flight plan was for science flights over the Grand Mesa, a pass over the Colorado river and an overpass of the corner reflectors at the airport. The radiometer did not operate to allow all six channels of the radar to collect data. The radar collected data throughout the flight on all six channels.

Accomplishments

Passover of the corner reflectors deployed at the airport

 Science flight over the Grand Mesa including three staggered loops over the Mesa and a pass over as SNOTEL experiment site

A pass over the Colorado river

| Instrument | Operated | | Instrument Issues/Comments |
|-----------------|----------|------------|---------------------------------|
| WISM-Radar | yes | 1500 GByte | No issues reported on the radar |
| WISM-Radiometer | yes | 0 GB | Was turned off for flight |

Flight Report: Seventh flight for the WISM instrument of this campaign. Flight was conducted around the Grand Junction airport and over the Grand Mesa. Kerry Speed and Tim Durham flew. Pilots were Thomas Sommerville and Ross Rice. Sky was mostly cloudy. The aircraft flew at 5000 ft above ground level during all data collects. The radar worked well with all channels collecting data for the duration of the flight.